

Application Serial No.: 10/627,143  
Applicant(s): Spector et al.

Docket No.: N.C. 84,766

**Amendments to the Claims:**

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This listing of claims will replace all prior versions and listings of claims in the application.

**Listing of Claims:**

Claims 1-26 (withdrawn)

Claim 27 (currently amended) A method for assaying biomolecules, comprising the steps of:

A. functionalizing a support with acrylate groups;

B. reacting said acrylate groups of said support with a hydrogel polymer selected from the the group consisting of the composition of claims 1, 18, or 19, a composition of matter comprising a hydrogel polymer containing a sugar said hydrogel being the polymerization reaction product of a sugar compound with a polymerizable double bond a crosslinker with two or more polymerizable double bonds and a third compound with a polymerizable double bond and an amino or carboxyl group, a composition of matter comprising a hydrogel polymer containing a sugar said hydrogel being the polymerization reaction product of a sugar compound with a polymerizable double bond a crosslinker with two or more polymerizable double bonds and a third compound wherein said third compound is 2-acrylamidohydroxyacetic acid, and a composition of matter comprising a hydrogel polymer containing a sugar said hydrogel being the polymerization reaction product of a sugar acrylate a bis-acrylamide cross linker and an aminoacrylic third compound selected from the group of acrylic acid, methacrylic acid, amides, and derivatives thereof consisting of an N-propylamino-acrylamide or N-propylamino- methacrylamide;

wherein said hydrogel is linked to said glass plate through said acrylate groups;

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C. reacting said biomolecule to be assayed with said hydrogel to form a covalent bond between said biomolecule and said hydrogel,

D. assaying said biomolecule covalently bonded to said hydrogel.

Claim 28 (withdrawn)

Claim 29 (withdrawn)

Claim 30 (original) The method according to claim 27, wherein said biomolecule is a protein.

Claim 31 (currently amended) The method according to claim 27, wherein said biomolecule assay is based on a biomolecule having a ~~fluorophore~~ fluorophore group.

Claim 32 (currently amended) The method according to claim 27, wherein said biomolecule is CY3- ~~Staphylococcal~~ Staphylococcal enterotoxin B (SEB).

Claim 33 (currently amended) The method according to ~~claim 24~~ claim 27, wherein said biomolecule assay is based on fluorescence, nuclear, magnetic or optical methods commonly employed.